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Product Specification

Model name:
2W Stereo Audio Amplifier
(MelodyGear AUD-001)

Draft
Revision: 0.1

Issue Date: 19/May/2005

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Revision History

Edition #		Reason for revision	Issue date	Author
0.1	●	Initial Draft Document	2005/5/19	Martin Huang
	●			
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Confidentiality Disclaimer

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General Introduction

Introduction:

The Melody AUD-001 operates can drive 1.8W continuous RMS power into 4Ω load per channel or 1.2W continuous RMS power into 8Ω load per channel. It also supports the Bridge-Tied Load (BTL) mode for driving the speakers, Single-End (SE) mode for driving the headphone. The Total harmonic distortion (THD) is smaller than 1% under the above operation condition.

Features:

- **Output Power at 1% THD+N, VDD=5V**
 - 1.8W/CH (typical) into a 4Ω Load
 - 1.2W/CH (typical) into a 8Ω Load

Applications:

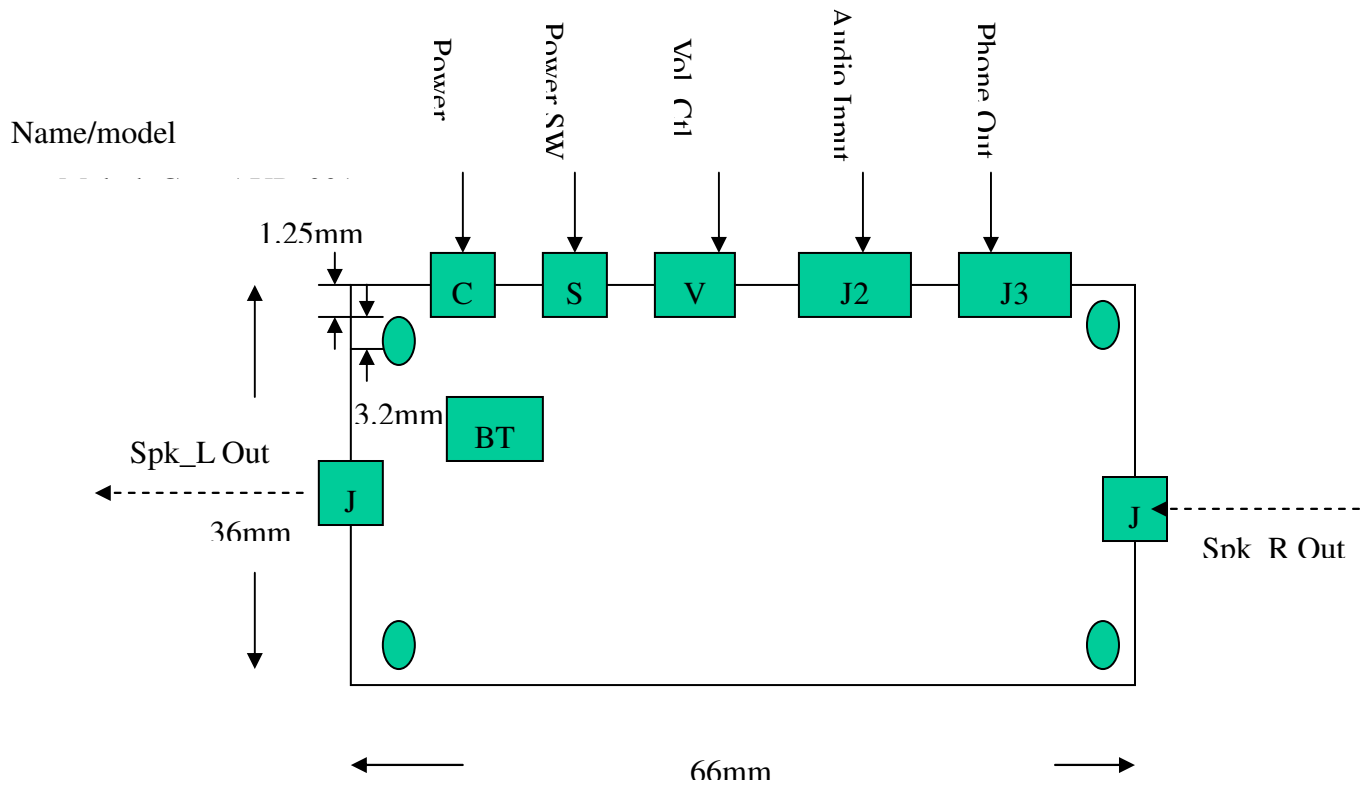
- **Stereo Power Amplifiers for Portable Audio Systems, such as MP3 player or music chair, music table, music carry bag, music bike, music tent, etc...**

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Product Specifications

1. Architecture diagram



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2. Product Features:

2.1 Hardware & Physical Specification

#	Feature	Detailed Description
2.1.1	Power Supply	1. Battery AA (1.5V) x4* 2. (Optional) External Power Adapter with 100 to 240V AC input 5V/2A
2.1.2	Power Switch	Switch External Power Adapter or Battery
2.1.3	Volume Control	Up/Down the volume of sound/music
2.1.4	Audio input	30cm audio cable + plug to input audio/music
2.1.5	EarPhone output (Optional)	Audio Jack to Earphone or headphone output
2.1.6	Speakers output	Line out to 4Ω/8Ω Speakers output
2.1.7	Operating Temperature Range	-40 to +85 degree C
2.1.8	Operating Humidity Range	10% to 90%
2.1.9	Installation	TBD
2.1.10	Weight	TBD
2.1.11	Dimension (estimated)	TBD(L) x (w) x (H) mm

* **Battery lifecycle is about 10 hrs.**

2.2 Key Components

#	Feature	Detailed Description
2.2.1	2W Stereo Audio Amplifier	<ul style="list-style-type: none">Output Power at 1% THD+N, VDD=5V --1.8W/CH (typical) into a 4Ω Load --1.2W/CH (typical) into a 8Ω Load

3. Outlook

Mechanical Design

TBD

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5. Environmental Requirement

#	Feature	Detailed Description
5.1	Operating Temperature	-40 ~ +85°C
5.2	Operating Humidity	10% ~ 90% (Non-condensing)

6. Certifications

#	Feature	Detailed Description
6.1	Safety Certification	FCC CE VCCI (Japan)

7. Package Content

Gift box Package:

MelodyGear AUD-001 with 30 cm audio cable + plug

Battery AA x4 or Power Adapter(5V/2A) (Optional)